



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,304	12/22/2000	Julio C. Palmaz	6006-019	3650

7590 04/11/2002

ROSENBAUM & ASSOCIATES, P.C.  
Suite #3653  
875 North Michigan Avenue  
Chicago, IL 60611

EXAMINER

MILLER, CHERYL L

ART UNIT

PAPER NUMBER

3738

DATE MAILED: 04/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/745,304

Applicant(s)

PALMAZ ET AL.

Examiner

Cheryl L. Miller

Art Unit

3738

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 December 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Double Patenting*

1. Claims 1-10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14-23 of copending Application No. 09/707,685. Although the conflicting claims are not identical, they are not patentably distinct from each other because application 09/707,685 only differs by having longitudinal and circumferential members in the independent claim. It is common knowledge in the art that most stents consist of longitudinal and circumferential members in order to provide flexibility and expansion. It would have been obvious to one having ordinary skill in the art at the time the invention was made to add or subtract the limitation of longitudinal and connecting circumferential members to a stent in order to provide flexibility and expansion.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. The examiner has recognized there is at least one common inventor with the two applications. However, in the case of a double patenting rejection, the inventive entity must be the same in both applications. It appears there might be an error in the inventorship of at least one of the applications.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who

Art Unit: 3738

has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-7, 9-10, 11-12, and 14-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Roth (USPN 6,096,175). Roth discloses a method for manufacturing a stent, which includes all limitations recited in the claims. Referring to claims 1 and 11, Roth discloses a method of manufacturing an implantable medical device or stent (col.4, lines 8-11) comprising steps of providing a substrate (36), (36+50), depositing a stent-forming metal onto the substrate by vacuum deposition (col.5, lines 35-38, 58-59; col.6, lines 8-11), and removing the substrate from the stent (col.5, lines 63-65; col.6, lines 3-4, 50-51). Roth discloses a stent, which is radially expansible (col.2, lines 22-24).

Referring to claim 2 and 12, Roth discloses imparting a pattern onto the substrate surface or creating a 3-D exterior surface (col.5, lines 62-65; col.8, lines 3-8, 33-39).

Referring to claims 3 and 14, Roth discloses deposition of a metal onto the pattern or selective deposition (col.8, lines 8, 35-40, 55-62; col.9, lines 12-13).

Referring to claims 4 and 15, Roth discloses a sacrificial layer (50) on the substrate (col.7, lines 3-8).

Referring to claims 5-6, and 16-17, Roth discloses deposition by ion beam evaporation or sputtering (col. 6, lines 19-36).

Referring to claims 7, 10, 18, and 19, Roth discloses deposition in the presence of an inert gas selected from the group consisting of argon, xenon, nitrogen, and neon (col.5, lines 34-40).

Referring to claim 9, Roth discloses a planar substrate (col.4, lines 19, 29; col.10, lines 21-22).

Art Unit: 3738

Referring to claims 20-21, Roth discloses a medical device having a heterogeneity controlled surface (col.3, lines 49-52; col.6, lines 10-16), wherein the medical device comprises a tubular expandable stent (col.3, lines 25-30; col.4, lines 18-23, 34-42).

4. Claims 1-4, 8, 11-15, and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Moller et al. (USPN 5,772,864). Moller discloses a method of manufacturing a stent, which includes all limitations recited in the claims. Referring to claims 1 and 11, Moller discloses a method of manufacturing an implantable medical device or endoluminal stent (col.3, lines 7-10, 21-24; col.4, lines 10-13) capable of radial expansion (col.3, lines 27-28; col.5, lines 10-13, 21-22), having first structural elements defining a longitudinal axis and second structural elements defining a circumferential axis (fig.3, 7). Moller discloses a method comprising providing a substrate having an exterior surface (col.3, lines 28-30; col.5, lines 27-30), depositing a stent-forming metal onto the substrate by vacuum deposition (col.3, lines 30-31, 44-48; col.4, lines 38-40), and removing the substrate from the stent (col.3, lines 31-34, 49-50; col.11, lines 11-15).

Referring to claims 2 and 12, Moller discloses a step of imparting a pattern onto the substrate, the substrate having a 3-D exterior surface (col.3, lines 36-43; col.4, lines 60-63; col.5, lines 40-41, 45).

Referring to claims 3 and 14 Moller discloses a step of depositing a stent forming material onto a pattern or selective deposition onto the substrate (col.3, lines 45-48; col.4, lines 21-22, 65-67; col.7, lines 30-33).

Referring to claims 4 and 15, Moller discloses a deposition of a sacrificial layer onto the substrate (col.8, lines 54-60).

Referring to claims 8 and 13, Moller discloses a cylindrical substrate (fig.3).

Referring to claims 20 and 21, Moller discloses an implantable medical device having controlled heterogeneities on at least a luminal surface (col.3, lines 1-5; col.7, lines 52-55; col.8, lines 30-46; col.9,

Art Unit: 3738

lines 33-36, 67), wherein the medical device is a tubular expandable stent (fig. 8, 9; col. 1, lines 5-10; col. 4, lines 50-53; col. 7, line 52; col. 9, lines 3-23).

5. Claims 1-4, 6, 8-9, 11-15, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Reed et al. (USPN 6,197,013). Reed discloses a method of manufacturing a stent, which includes all limitations recited in the claims. Referring to claims 1 and 11, Reed discloses a method of manufacturing an implantable medical device or expandable stent (col. 3, lines 59-61; col. 4, lines 4-7; col. 7, line 10), having longitudinal structural members and circumferential members (fig. 2A). Reed discloses a method comprising providing a substrate (col. 7, lines 17-19, 33; col. 10, lines 62-63), depositing a stent forming material onto substrate by vacuum deposition (col. 9, lines 44-54; col. 10, lines 10-12, 66-67), and removal of substrate from stent (col. 11, lines 4-5).

Referring to claims 2 and 12, Reed discloses a step of imparting a pattern onto the substrate, the substrate having a 3-D structure (col. 7, lines 52-53; col. 8, lines 9-10, 40; col. 9, lines 7-8; col. 10, lines 62-64).

Referring to claims 3 and 14, Reed discloses a step of depositing a stent forming material onto the substrate pattern, or selectively depositing the material onto the substrate (col. 9, line 59; col. 11, lines 2-3).

Referring to claims 4 and 15, Reed discloses a deposition of a sacrificial layer onto the substrate (col. 9, lines 42-43).

Referring to claims 6 and 17, Reed discloses a method conducted by sputtering (col. 9, lines 51-54).

Referring to claims 8-9 and 13, Reed discloses a substrate of cylindrical and planar shape (col. 10, lines 10-14, 62-63).

*Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USPN 5,376,463 to Bak et al. discloses a method consisting of pattern placement onto a substrate, deposition of a metal onto the substrate, and removal of the metal from the substrate, the disclosed invention containing features related to claims 1, 2, 4, 5, and 7.

USPN 5,798,042 to Chu et al. discloses a biological filter made by pattern placement onto a substrate, application of a sacrificial layer to the substrate, application of a film, and removal of the sacrificial layer to release the film, the disclosed invention containing features related to claims 1-4.

USPN 6,322,588 B1 to Ogle et al. discloses a medical device made by pattern placement onto a substrate, masking the substrate, and deposition of a film, the disclosed invention containing features related to claims 2-6.

USPN 5,744,958 to Werne discloses various types of deposition and the benefits to each type.

USPN 4,444,848 to Shanefield et al. discloses a method of making a circuit board consisting of pattern placement onto a substrate, vacuum deposition of a metal onto the substrate, wherein sputtering or ion beam evaporation may be used.

USPN 5,849,206 to Amon et al. discloses a method of producing a stent comprising providing a substrate, and vapor depositing a metal coating onto the substrate in the presence of an inert gas, preferably argon.

Art Unit: 3738

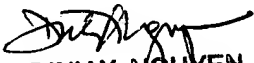
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl L. Miller whose telephone number is (703) 305-2812. The examiner can normally be reached on Monday-Friday, 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (703) 308-2111. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 746-7447 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.



Cheryl L. Miller  
April 2, 2002

  
**DINH X. NGUYEN**  
**PRIMARY EXAMINER**